

SWEETWATER SPRINGS WATER DISTRICT

TO: Board of Directors

AGENDA NO. V-C

FROM: Steve Mack, General Manager

Meeting Date: August 6, 2015

Subject: DISCUSSION/ACTION RE APPROVAL OF THE REVISED 2016-2023 CAPITAL IMPROVEMENT PROGRAM

RECOMMENDED ACTION: Approve Resolution 15-15 which adopts the revised 2016-2023 Capital Improvement Program (CIP).

FISCAL IMPACT: none

DISCUSSION:

At the June 2015 Board Meeting District staff presented a summary of the as hoc Budget Subcommittee review of the District's Capital Improvement Program (CIP) including recommendations for revision of the approved CIP. This review was an outcome of an earlier discussion of the CIP in December 2014 and February 2015. Tim Lipinski and Victoria Wikle were appointed to the Subcommittee and the review started shortly after with periodic meetings with District staff, General Manager Steve Mack and Field Manager Kevin Gilman.

Items that the Subcommittee addressed included the selection criteria listed below:

- **Improved water quality**
- **Water losses**
- **Potential Liability**
 - **Age of Pipe**
 - **Pipe Material**
 - **Terrain**
 - **Difficulty of Repair/Maintenance**
- **Storage and pressure zone requirements**
- **Costs per service**

Staff compiled a list of capital projects proposed in various historical documents and then edited that list to uncompleted proposed projects and other possible projects that have come to the attention of District staff. A review of the historical information shows that the District has been diligent in carrying out recommended projects. Most of the projects suggested and analyzed by consulting engineering expertise have been completed. There are still many projects on the list and more are being added.

Table 1 shows the proposed 2016-2023 CIP developed after consideration of the review by the ad hoc CIP Subcommittee. This proposed CIP has taken into consideration the ranking criteria and included a thorough discussion of the historical CIP and all the projects. The review of the

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historical capital projects and how they fit into approved CIP's showed that experience in the field changed the timing of completing these projects.

A major change in the CIP is the inclusion of the River Road project. Two leaks associated with the water main along River Road near Rio Nido, the pipe material of that main - cast iron - the condition of the pipe material when it was excavated for repair, and the fact that it's the only supply line into Rio Nido have moved this project to the top of the list.

Something different with this proposed CIP is a relatively small capital project in FY 2018, replacement of the green sand filter at the Monte Rio treatment plant. In earlier iterations we were proposing no capital program in 2018 because a full CIP - in the \$1 million range - would go into District Policy Reserves and we haven't wanted to do that if not necessary. The green sand filter replacement is a needed project, we have contemplated replacing it for some time - at the time of its last rehabilitation in 2010 we discussed that the next rehabilitation would be needed in about eight years and would need to be a major effort or a replacement with a similar process as used at the Highland treatment plant. We are recommending replacing it with ATEC technology because we have had good experience with it at Highland and because the green sand filter technology requires use of potassium permanganate which is a hazardous material and requires very careful operation to achieve the needed results. This capital project is not related to any of the main replacement projects; thus no real economy of scale exists with other capital projects, and because considerable staff time will be needed to oversee this project, we agreed this would be a good 'off-year' project.

Since our discussion in June, we have added the Park Ave. Tank replacement to the Park Ave. element of the work scheduled for FY 2019. This tank is currently having an emergency repair to its foundation and that repair is temporary. Replacement or repair, if possible, of the tank would make sense for inclusion the 2019 Park Ave. project.

Table 2 shows the financial model analysis of the proposed CIP. It includes 3% increases in every year and a drop in the Capital Debt Reduction Charge in 2013 because debt payments are lower - the State loans are paid off then. Reserves above District policy are negative in 2023, but not by much and there are so many assumptions going into these calculations (CDRC dropping by \$170,000 is one), that there should be no alarm about that negative amount. The analysis shows that we need to skip FY 21 to avoid going into policy reserves, and includes the small CIP in 2018.

The most important recommendation in the proposed CIP is moving forward with the River Road water main replacement in FY 2017. This is a project that has had demonstrated leaks, is cast iron with a probable installation date of the 1920's-1930's. It could catastrophically fail which would cut off water supply to Rio Nido as well as the 70 customers directly connected to this main.

The other projects in the CIP are our current recommendation based on the information we have today. We will continue with an annual review of the CIP to confirm the current Program or make other recommendations as current experience dictates.

Staff will be looking into financing opportunities to assist with funding this CIP. I have heard and read about funding becoming available for projects that reduce system losses, but I haven't yet seen details of this becoming available to us.

Table 1. Sweetwater Springs Water District Proposed 2016-2023 CIP Projects by Year				
Year	Projects	Estimated Cost	Cost/Service	Comments
2016				
	Canyon 1 (Rio Nido) Replace approximately 3,900 ft of existing mainline and 75 services along Canyon 1 Rd., Memory Ln., Memory Park Rd.	\$890,000	\$11,867	Contract Awarded for \$915,433, Design, CMI \$175,000
	2016 Total	\$890,000		
2017				
	Replace approximately 3,500 ft of existing main and 70 services on Old River Rd at Morningside east to the eastern section of Foothill Drive. Include Orchard Rd and Foothill Drive and River Rd on river side of the road. Feeds Rio Nido.	\$985,000	\$14,071	Cost is rough estimate, will be refined during design
	2017 Total	\$985,000		
2018				
	Monte Rio Treatment Plant Green Sand Filter Replacement. Serves Monte Rio system (1100 services)	\$200,000	NA	
	2018 Total	\$200,000		
2019				
	Park Ave. (GV) replace approximately 2900 lf of main line on Park Ave. and McLane, 37 services. Loop two deadend lines. Replace/repair Park Ave. Tank	\$788,000	\$21,297	
	Cherry St. (GV) replace approximately 440 lf of main line, 13 services.	\$126,000	\$9,692	
	2019 Total	\$914,000	\$18,280	
2020				
	Wright Drive main pressure zone. – (GV) Replace approximately 1,120 ft of existing mainline and 18 associated services along Wright Dr. and Wright Ln.	\$275,000	\$15,278	
	Woodland Drive – mainline replacement. (GV) Replace approximately 1,900 ft of existing mainline and 27 associated services along Woodland Dr in the main pressure zone.	\$400,000	\$14,815	
	2020 Total	\$675,000	\$15,000	
2021	Skip Capital Project			
2022				

	Schoeneman pressure zone- main line replacement. (GV) Replace approximately 3,000 ft of existing mainline and 47 associated services along Highland Way, Sunset Ave, Woodland Dr, Laurel Way and Morningside Drive. (requires completion of Schoeneman Tank and includes Shoeneman Booster)	\$814,300	\$17,326	
	Schoeneman Tank– Replace the existing 10,000 gallon tank with a 30,000 gallon storage tank. 2005 cost estimate	\$127,000		
	2021 Total	\$941,300	\$20,028	
2023				
	Wright Drive upper pressure zone. – (GV) Replace approximately 3,280 ft of existing mainline and 47 associated services along Wright Dr, Glenda Dr, Natoma Dr. (requires completion of Natoma Tank and includes Edgehill Booster)	\$870,000	\$18,511	
	Natoma Tank – Replace the existing 10,000 gallon storage tank with a 30,000 storage tank. 2005 cost estimate	\$190,000		
	2023 Total	\$1,060,000	\$22,553	
	Total Cost of 2017-2023 Projects	\$4,675,300		
	Other Projects			
	Highway 116 (MR) Replace approximately 850 ft of main line.	\$280,000		
	Main St (MR) Replace approximately 800 ft of mainline along Main St.	\$180,000		
	Upper Summit Tank - Construct a storage tank with a nominal capacity of approximately 120,000 gallons at the District–owned site on McLane Avenue. Project to include relocation/ construction of the existing hydro-pneumatic pump station.	\$490,000		wait for Dubrava Development?
	Total Approximate Cost of Future, Unapproved Projects	\$950,000		

Table 2. OPERATING AND CAPITAL BUDGET SUMMARY - 3% Increase, Proposed CIP		Water Rate, CDRC Increase =		3%		Sales Flat							
		FY14 Actual	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23		
REVENUE													
OPERATING REVENUE			Reduced WS	Flat	10% Increase	Flat							
Water Bill Revenue													
Capital Debt Reduction Charge		246,360	253,751	261,364	269,205	277,281	285,599	294,167	302,992	312,082	324,300		
Base Rate 35966		1,351,512	1,392,058	1,433,819	1,476,834	1,521,139	1,566,773	1,613,776	1,662,190	1,712,055	1,763,417		
Water Usage		589,167	546,157	562,542	637,360	656,481	676,175	696,461	717,354	738,875	761,041		
Total Water Sales		1,940,679	1,938,215	1,996,361	2,114,194	2,177,620	2,242,949	2,310,237	2,379,544	2,450,930	2,524,458		
Total OPERATING REVENUE		2,223,005	2,191,966	2,257,725	2,383,399	2,454,901	2,528,548	2,604,404	2,682,536	2,763,013	2,758,758		
Total NON-OPERATING REVENUE		107,484	107,071	108,911	110,788	112,702	114,655	116,647	118,679	120,751	122,865		
Total Income		2,330,490	2,299,037	2,366,636	2,494,187	2,567,603	2,643,203	2,721,051	2,801,215	2,883,763	2,881,623		
EXPENSES													
Total Salary		763,810	778,066	801,408	825,450	890,210	916,920	944,430	972,760	1,001,940	1,032,000		
Total Benefits		316,700	312,785	324,479	336,764	357,497	371,100	385,286	400,082	415,516	431,616		
SALARY & BENEFITS		1,078,736	1,090,851	1,125,886	1,162,214	1,247,707	1,288,020	1,329,716	1,372,842	1,417,456	1,463,616		
SERVICES & SUPPLIES increase =			1%										
SERVICES & SUPPLIES		460,192	524,794	469,442	474,136	478,878	483,666	488,503	493,388	498,322	503,305		
TOTAL OPERATING EXPENSES		1,538,928	1,615,645	1,595,328	1,636,350	1,726,585	1,771,686	1,818,219	1,866,231	1,915,778	1,966,921		
OPERATING SURPLUS/DEFICIT		\$791,562	\$683,392	\$771,308	\$857,836	\$841,018	\$871,517	\$902,832	\$934,985	\$967,985	\$914,702		
FIXED ASSET EXPENDITURES		16,747	40,000	11,000	40,000	11,000	40,000	11,000	40,000	11,000	40,000		
Tfers to CIRF for CDR Revenue		484,725	253,751	261,364	269,205	277,281	285,599	294,167	302,992	312,082	324,300		
Tfers to CIRF		537,466	340,000	470,000	470,000	470,000	460,000	510,000	510,000	560,000	550,000		
Total TRANSFERS TO OTHER FUNDS		1,062,191	633,751	771,364	779,205	787,281	785,599	844,167	852,992	912,082	824,300		
SURPLUS/DEFICIT		-287,377	9,640	-11,056	38,632	42,737	45,917	47,665	41,992	44,903	50,402		
Capital Budget													
REVENUE/SOURCES OF FUNDS													
Net Operating Revenues**		250,089	349,640	458,944	508,632	512,737	505,917	557,665	551,992	604,903	600,402		
Assessments		730,176	777,000	777,000	777,000	777,000	777,000	777,000	777,000	777,000	777,000		
Capital Debt Reduction Charge***		484,725	253,751	261,364	269,205	277,281	285,599	294,167	302,992	312,082	324,300		
Capital Interest		16,287	30,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000		
Transfers From CIRF/Reserves		876,614	750,000	630,000	520,000		600,000	250,000		320,000	540,000		
TOTAL REVENUE		2,134,237	2,160,392	2,137,308	2,084,836	1,577,018	2,178,517	1,888,832	1,641,985	2,023,985	2,161,702		
EXPENSES													
Total Debt Payments		1,059,252	988,314	1,038,300	1,038,300	1,038,300	1,038,300	1,038,300	1,017,300	847,300	847,300		
CIP 2014													
CIP 2015													
CIP 2016													
CIP 2017													
CIP 2018													
CIP 2019													
CIP 2020													
CIP 2021													
CIP 2022													
CIP 2023													
Annual CIP		1,056,658	1,122,100	1,055,433	1,000,000	200,000	1,096,800	810,000	No Project	1,129,560	1,272,000		
In-House Construction Projects		18,328	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000		
TOTAL EXPENSES		2,134,237	2,150,414	2,133,733	2,078,300	1,278,300	2,175,100	1,888,300	1,057,300	2,016,860	2,159,300		
SURPLUS/DEFICIT		0	9,978	3,575	6,536	298,718	3,417	532	584,685	7,125	2,402		
FUND AND LOAN BALANCES (EOY)													
Ending Funds ab District Policy		2,507,800	1,767,778	1,141,353	627,889	926,607	330,024	80,556	665,240	352,366	(185,233)		
NET CAPITAL FUNDING****		422,026	422,078	469,008	526,536	538,718	540,217	600,532	624,685	856,685	774,402		

* Starting values based on projected FY13 EOY
 ** =Transfer to CIRF plus net operating surplus
 *** =Transfers from CDRC
 **** =Net Operating Revenues + Assessments + CDRC + Capital Interest - Total Debt Payments

Resolution No. 15-15

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SWEETWATER SPRINGS WATER DISTRICT ADOPTING THE 2016-2023 CAPITAL IMPROVEMENT PROGRAM

WHEREAS, the Board of Directors has reviewed the overall Capital Improvement Program and has established priorities for the upcoming eight year period;

NOW THEREFORE BE IT RESOLVED, that the Board of Directors of the SWEETWATER SPRINGS WATER DISTRICT, Sonoma County, California, hereby adopts the Revised 2016-2023 Capital Improvement Program attached as Exhibit A hereto, effective August 6, 2015.

BE IT FURTHER RESOLVED, that this Resolution supercedes and replaces Resolution 13-03.

I hereby certify that the foregoing is a full, true, and correct copy of a Resolution duly and regularly adopted and passed by the Board of Directors of the SWEETWATER SPRINGS WATER DISTRICT, Sonoma County, California, at a meeting held on August 6, 2015, by the following vote.

Director	Aye	No
Sukey Robb-Wilder	_____	_____
Tim Lipinski	_____	_____
Rich Holmer	_____	_____
Gaylord Schaap	_____	_____
Victoria Wikle	_____	_____

Gaylord Schaap
President of the Board of Directors

Attest: Christine Hanley
Acting Clerk of the Board of Directors

Exhibit A

Sweetwater Springs Water District

**Capital Improvement Program
2016-2023**

Revised August 6, 2015

Board of Directors

Sukey Robb-Wilder

Rich Holmer

Tim Lipinski

Gaylord Schaap

Victoria Wikle

General Manager

Steve Mack

2014-2019 Sweetwater Springs Water District Capital Improvement Program January 8, 2013

Capital improvements are an important element of the District's work effort. The District has an aging infrastructure, an unacceptable amount of unaccounted for water and District staff spend too much time reacting to leaks in the distribution system. Table 1. 2016-2023 Capital Improvement Program (CIP) lists needed District projects by year and includes estimated costs. The ranking criteria for the priority of capital projects are:

- **Improved water quality**
- **Water losses**
- **Potential Liability**
 - **Age of Pipe**
 - **Pipe Material**
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